Yorktown Phase I and Phase II

Emergency Response Action Plan

Developed by:

TECHNICAL RESPONSE PLANNING
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EMERGENCY RESPONSE ACTION PLAN

Last revised: August 28, 2015

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1.0 FACILITY DESCRIPTION

The tanks/equipment covered by this plan are Dominion Virginia Power (hereafter called Dominion) owned tanks/equipment located at the Plains Marketing LP Terminal (hereafter called Plains Terminal) located in Yorktown, Virginia. The Plains Terminal is adjacent to Dominion's Yorktown Power Station. The area covered by this plan will be called Yorktown Phase I and Phase II. The oil storage tanks/equipment at Yorktown Phase I and Phase II are owned by Dominion, but operated by Plains Terminal. This facility was previously covered by SPCC, FRP, and ODCP plans developed and maintained by the previous operator (Western Refinery); however, Yorktown Phase I and Phase II are now being covered by this combined FRP/SPCC/ODCP plan. Other portions of the Terminal, owned and operated by Plains Terminal, are not covered within this plan. The day-to-day operations at the Phase I and II area, including environmental requirements such as oil transfers, secondary containment draining, visual inspections, security checks, etc, are conducted by Plains personnel under an agreement with Dominion.

An Area Map is provided in FIGURE 1-3. A Site Diagram, FIGURE 1-4, marks the location and contents of each container.

The facility consists of two areas of bulk storage tanks, Phase I (constructed in 1972) and Phase II (constructed in 1975). Phase I consists of tanks A, B, 160, and 161, as well as drums and transformers. Phase II consists of tanks C, D, E, and 162 as well as transformers.

The facility is located approximately 60 miles southeast of Richmond, Virginia, and 30 miles north of Norfolk near Yorktown in York County.

2.0 RESPONSE STEPS

All checklists and forms in Section 2 of this plan are provided for guidance only. Their use in a specific incident is entirely at the discretion of the QI, Incident Commander, or On-Scene Coordinator.

To be used in conjunction with SECTION 2.2 through 2.4.

SPECIFIC RESPONSE ACTIONS	COMMENT
First Person On-Scene	
Take appropriate personal protective measures.	
Immediately notify the Qualified Individual and Operations Control Center.	
Do not investigate on your own; take a buddy.	
Take appropriate action to protect life and ensure safety of personnel. Check wind direction when vapor cloud is a possibility. Advise personnel in the area of any potential threat and/or initiate evacuation procedures.	
Refer to incident-specific Initial Response Actions for Spill Response (**SECTION 2.1**) Fire and/or Explosion (**SECTION 2.2**), Evacuation (**SECTION 2.3**), and Medical (**SECTION 2.4**), as appropriate.	
Qualified Individual	
Assume the role of Incident Commander until relieved.	
Restrict access to the incident scene and surrounding area as the situation demands. Take any other steps necessary to minimize any threat to health and safety.	
Request medical assistance if an injury has occurred.	
Evacuate non-essential personnel and activate Spill Management Team (SMT). (**See FIGURE 3-2**)	
Call out local emergency responders (**See FIGURE 3-2**). If explosive/flammable vapors are a possibility, inform dispatcher to warn responders should NOT use flares to control traffic.	
Coordinate further initial response actions with local supervision and Incident Commander.	
Refer to incident-specific Initial Response Actions for Spill Response (**SECTION 2.1**) Fire and/or Explosion (**SECTION 2.2**), Evacuation (**SECTION 2.3**), and Medical (**SECTION 2.4**), as appropriate.	
Incident Commander/Qualified Individual	
Evaluate the Severity, Potential Impact, Safety Concerns, and Response Requirements based on the initial information provided by the First Person On-Scene.	
Activate the Spill Management Team (SMT **FIGURE 3-2**), as the situation demands (**SECTION 4** of the FRP).	
Activate additional response contractors and local response resources, as the situation demands (**SECTION 3.0**).	
Confirm safety aspects at site, including need for personal protective equipment, sources of ignition, and potential need for evacuation.	
Coordinate/complete additional Internal and External Notifications (**SECTION 3.0**).	
Proceed to incident site and direct response and clean-up operations.	
Designate SMT responsibilities to personnel responding to the scene as the situation demands (**SECTION 4** of the FRP).	
Refer to incident-specific Initial Response Actions for Spill Response (**SECTION 2.1**) Fire and/or Explosion (**SECTION 2.2**), Evacuation (**SECTION 2.3**), and Medical (**SECTION 2.4**), as appropriate.	

2.1 Spill

SPILL RESPONSE ACTIONS		
RESPONSE ACTION	**PERSON TAKING ACTION (INITIALS)**	**DATE/TIME ACTION TAKEN**
First Person to Discover Spill		
Secure the scene. Isolate the area and assure the safety of people and the environment. Keep people away from the scene and outside the safety perimeter.		
Immediately shut down pipeline (if applicable) if it can be done safely. Remotely controlled motor operated valves will be closed by the Operations Center as soon as a leak is detected.		
Ensure that containment area drainage valve(s) or other area drainage valve(s) are closed (if applicable) if it can be done safely.		
Eliminate possible sources of ignition in the vicinity of the spill if it can be done safely.		
Qualified Individual		
Assume role of Incident Commander until relieved.		
Conduct preliminary assessment of health and safety hazards. Verify the type of product and quantity released. Request / obtain Material Safety Data Sheets as necessary.		
Ensure that trained personnel identify / isolate the source and minimize the loss of product.		
Classify the incident as a spill to land and / or water. (**SECTION 3.1**)		
Call out spill response contractors (**FIGURE 3-2**).		
Obtain the information necessary to complete the Oil Spill Report Form (**FIGURE 3-1**) and make the appropriate regulatory notifications. (**FIGURE 3-2**).		
On-Scene Coordinator/Qualified Individual		
Activate all or a portion of Spill Management Team (SMT - **FIGURE 3-2**) (as necessary) if not yet activated.		
If safe to do so, direct facility responders to shut down potential ignition sources in the vicinity of the spill, including motors, electrical pumps, electrical power, etc. Keep non-essential personnel away from spill area.		
If safe to do so, direct facility responders to shut down and control the source of the spill. Be aware of potential hazards associated with product and ensure that lower explosive limits (LELs) are within safe levels before sending personnel into the spill area.		
If safe to do so, direct facility responders to stabilize and contain the situation. This may include berming or deployment of containment and/or sorbent boom.		
For low flash oil (<100°F); consider applying foam over the oil, using water spray to reduce vapors, grounding all equipment handling the oil, and using non-sparking tools.		
If there is a potential to impact shorelines, consider lining shoreline with sorbent or diversion boom to reduce impact.		

All checklists and forms in Section 2 of this plan are provided for guidance only. Their use in a specific incident is entirely at the discretion of the QI, Incident Commander, or On-Scene Coordinator.

2.1 Spill, Continued

SPILL RESPONSE ACTIONS, CONTINUED		
RESPONSE ACTION	**PERSON TAKING ACTION (INITIALS)**	**DATE/TIME ACTION TAKEN**
On-Scene Coordinator/Qualified Individual, Continued		
Ensure the SMT has mobilized spill response contractors (if necessary). It is much better to demobilize equipment and personnel, if not needed, than to delay contacting them if they are needed.		
Document all response actions taken, including notifications, agency/media meetings, equipment and personnel mobilization, and deployment, and area impacted. (Refer to **SECTION 5** of the FRP for documentation.)		
Initiate spill tracking and surveillance operations. Determine extent of pollution via surveillance aircraft or vehicle. Estimate volume of spill utilizing information in **SECTIONS 2.1.3** and **2.1.4** of the FRP. Send photographer / videographer if safe.		
SECONDARY RESPONSE ACTIONS (Refer to SMT job descriptions in **SECTION 4.6** of the FRP for detailed checklists of responsibilities.)		
FACILITY SPECIFIC RESPONSE CONSIDERATIONS (Refer to the **EMERGENCY RESPONSE ACTION PLAN (ERAP)** and **SECTION 6** for maps and sensitivity information).		

All checklists and forms in Section 2 of this plan are provided for guidance only. Their use in a specific incident is entirely at the discretion of the QI, Incident Commander, or On-Scene Coordinator.

2.1 Spill, Continued

SITE SPECIFIC ACTIONS	
DOCUMENT ALL ACTIONS TAKEN	**INITIALS**
Secure all drainage leading from the vicinity of the spill, as appropriate	
General site drainage from both the phase I and II areas flows to the east through storm water culverts to the Plains Terminal storm water pond. Storm water flows through the pond and ultimately discharges into the York River. Oil boom is permanently deployed across the pond at multiple locations to retain any spilled oil that reaches it. If oil reaches the storm water pond personnel will deploy sorbents and booms as appropriate. Both the Plains Terminal and Yorktown Power Station maintain additional containment boom.	
Once deployment of response equipment has been completed, initiate recovery of product.	
Upon arrival of SMT, assure all information is accurate and complete prior to being released.	
Assure proper documentation has been completed from initial discovery of spill to finish; reference **SECTION 5** in the FRP.	

2.2 FIRE AND/OR EXPLOSION

Your first consideration is always the safety of people in the immediate area, including your own.

For Fossil & Hydro Facilities, follow appropriate Dominion Fire and Emergency Response Procedures. In addition, refer to Incipient and Structural Fire Training Program.

For Gas Transmission Facilities, specific incident response checklists are provided in separate facility procedures.

2.3 Evacuation

EVACUATION CHECKLIST	
TASK	**INITIALS**
Sound alarm or otherwise notify facility personnel of evacuation	
Consider wind direction if vapor cloud is a possibility when determining evacuation route	
Incident Commander or designee, such as QI, must take a copy of the FRP, response checklists, cell phones, radios, and any other items needed to run the response for the first several hours, to the Evacuation Regrouping Area	
Conduct a roll call is conducted at the Evacuation Regrouping Area to ensure that all personnel are accounted for	
Monitor situation (weather, vapors, product migration) for significant changes	
Assist in developing a Rescue Plan if necessary	

2.3 Evacuation, Continued

EVACUATION FACTORS	
FACTOR	**DESCRIPTION**
Stored material location	• Located in oil storage area • Identified in Site Diagram (**Figure 1.4**)
Spilled material hazards	• Hazard is fire/explosion
Water currents, tides, or wave conditions	• Not applicable
Evacuation routes	• Routes are summarized on Evacuation Plan Diagram (**APPENDIX C**) • Criteria for determining safest evacuation routes from facility may include: wind direction, potential exposure to toxins and carcinogens, intense heat, potential for explosion/fire, and blockage of planned route by fire, debris, or released liquid
Alternate evacuation routes	• Alternate routes may exist; refer to Evacuation Plan Diagram (**APPENDIX C**)
Injured personnel transportation	• Emergency vehicles can be mobilized to the facility
Alarm/Notification system location	• A public address system is in use, with various connections (access points) around the facility. Anyone observing any type of emergency can call the control room, from which emergency announcements and instructions can be broadcast throughout the station.
Community evacuation plans	• Company may request local police, county sheriff, and/or state police assistance. Community evacuations are the responsibility of these agencies.
Spill flow direction	• The flow direction of an uncontained spill from the secondary containment berms surrounding the bulk fuel oil storage tanks is north towards the York River. The York River flows to the Chesapeake Bay, which empties into the Atlantic Ocean • Identified in facility drainage diagram (**APPENDIX C**)
Prevailing wind direction and speed	• The prevailing wind direction at the refinery is from the SW at 10.6 mph. • Because wind direction varies with weather conditions, consideration for evacuation routing will depend in part on wind direction
Emergency personnel/response equipment arrival route	• Vehicle access to the site is through the main gate from Goodwin Neck Road. The site is also accessible from water through the USCG dock located along the York River. See the Facility Area Map, FIGURE 1-3, for more information on facility location. • Directions to nearest medical facility provided below

2.3 Evacuation, Continued

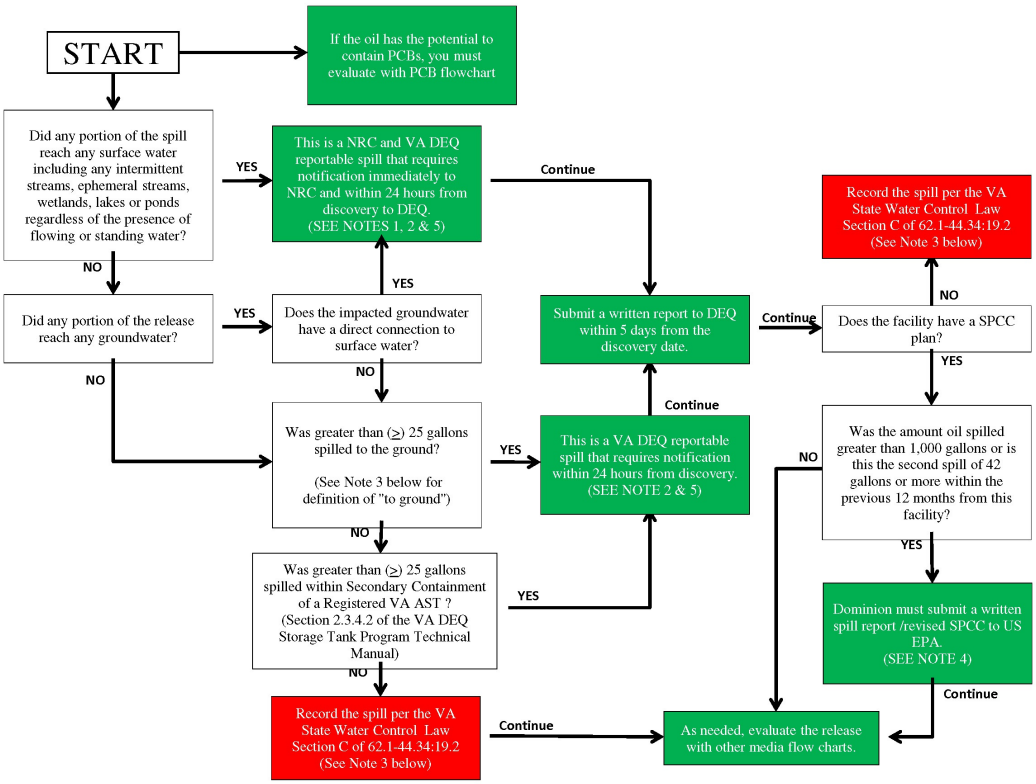
EVACUATION FACTORS, CONTINUED	
FACTOR	**DESCRIPTION**
Centralized check-in area	• The primary evacuation route and assembly check-in area will be through the main gate to the administration building. Alternatively, evacuation and assembly can be through the Dominion gate or contractor gate in the Phase I area, located along Waterview Road. See the site diagram for more details. • Supervisor is responsible for head count
Mitigation Command Center location	• Initial Command Center located at The Incident Commander will establish the Incident Command Post depending on the nature and location of the incident. The Administration Building, if accessible, will serve as the Primary Incident Command Post, with other locations serving as alternates as determined by the Incident Commander. • Mobile Command Posts may be established as necessary
Facility Shelter location	• The Administration Building may be used for shelter if accessible. Alternative shelter locations may be established by the Incident Commander, on an incident-specific basis. • Not a safe harbor from fires, explosions, vapor clouds, or other significant emergencies; however, may be used for temporary shelter from inclement weather
Directions to nearest medical facility	Directions to Mary Immaculate Hospital or Riverside Regional Medical Center : • Injured personnel will normally be transported to Mary Immaculate Hospital located at 2 Bernardine Drive or alternately to the Riverside Regional Medical Center at 500 J. Clyde Morris Boulevard, both in Newport News, Virginia, by non-company ambulance. For minor injuries, an injured individual could be transported by station or private vehicle.

2.4 Medical

MEDICAL CHECKLIST	
TASK	**INITIALS**
Summon Emergency Medical Services (EMS) to the scene	
Do not move the patient unless a situation (such as a fire) threatens their life	
If trained, provide first aid until the EMS arrives at the scene	
Follow additional facility-specific medical / first aid procedures as appropriate	

3.0 NOTIFICATIONS

FIGURE 3.1-1 - SPILL NOTIFICATION FLOW CHART



Notes Are Located On The Following Figure

FIGURE 3.1-2 - SPILL NOTIFICATION FLOW CHART

NOTE 1 – NATIONAL RESPONSE CENTER (NRC) NOTIFICATION

If practical, notify the facility ECC to make the notification to the NRC.
If the facility ECC or their backups cannot be reached the facility supervisor should make the notification, but in all cases the notification should be made immediately upon discovery.

The NRC telephone number is (800) 424-8802.
As an alternative the NRC report may be made online at: http://www.nrc.uscg.mil/pls/apex/f?p=201:1:0:::::, however a phone call is preferred immediately upon discovery.
When calling provide as much information as you have available including the following, however the NRC will ask a series of questions:

Type of material involved;
The associated hazards of the material;
Amount of material released;
Where the material was released (land, water, air or some combination);
Has the release been stopped or is it ongoing;
Concise directions to the location of the incident;
A listing of anyone or any entity that has also been notified;
Whether there are there any current injuries, and is the site safe for spill control work;
Weather conditions including temperature, precipitation, wind direction, and sky conditions;
Any, or potentially are there any, sensitive environmental receptors that have been or may be impacted by the spill or incident;
Whether there have there been any off-site impacts; and,
Actions taken to stop or contain the release

NOTE 2 - VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VA DEQ) NOTIFICATION

If practical, notify the facility ECC to make the notification to the VA DEQ.
If the facility ECC or their backups cannot be reached the facility supervisor should make the notification, but in all cases the notification should be made within two hours of discovery.

The 24 hour VA Emergency Services telephone number is (800) 468-8892.
When calling provide as much information as you have available including the following:

1. Type of material involved;
2. The associated hazards of the material;
3. Amount of material released;
4. Where the material was released (land, water, air or some combination);
5. Has the release been stopped or is it ongoing;
6. Concise directions to the location of the incident;
7. A listing of anyone or any entity that has also been notified;
8. Whether there are there any current injuries, and is the site safe for spill control work;
9. Weather conditions including temperature, precipitation, wind direction, and sky conditions;
10. Any, or potentially are there any, sensitive environmental receptors that have been or may be impacted by the spill or incident;
11. Whether there have there been any off-site impacts; and,
12. Actions taken to stop or contain the release.

NOTE 3 – VA DEQ DEFINITION OF SPILL "TO GROUND OR STATE LANDS"

Oil spills associated with Above Ground and Underground Oil spills not associated with AST or USTs
For oil spills that are not associated with VA's AST or UST programs, the VA Water Control Law (§62.1-44.34:19) is applicable. The Water Control Law states any spill to land equal to or greater than 25 gallons that is expected or has the potential of reaching state waters (surface, groundwater and wetlands) is reportable. Based on discussions with VA DEQ's Central Office, the guidance provided by DEQ for what is meant by "expected to reach state waters" is the following: any spill that occurs outside on a parking lot or road (impervious surfaces) that could be washed off during a storm event; or, within buildings that have drains or sumps that could allow the oil to be drained or pumped to state waters or areas that could be exposed to storm water. An oil spill less than 25 gallons is required to be recorded and records maintained for at least five (5) years. An oil spill of any quantity that reaches state waters and causes a sheen, is reportable to DEQ and NRC.
Storage Tanks (AST & UST)
The Virginia DEQ AST Guidance document states that an oil spill equal to or greater than 25 gallons spilled either inside containment or outside of containment is reportable. The guidance also states that "tanks" that have releases equal to or greater than 25 gallons inside basements are reportable, which means any AST(s) inside of a building even equipped with secondary containment is subject to reporting. This expectation applies to ASTs that have a capacity of more than 660 gallons and any UST.

NOTE 4 - US ENVIRONMENTAL PROTECTION AGENCY (EPA) WRITTEN NOTIFICATION

Whenever the facility has discharged more than 1,000 gallons of oil in a single discharge or discharged more than 42 gallons of oil in any two discharges occurring within any twelve month period, you must submit the following information to the US EPA Regional Administrator within 60 days from the time of the discharge:

(1) Name of the facility;
(2) Your name;
(3) Location of the facility;
(4) Maximum storage or handling capacity of the facility and normal daily throughput;
(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;
(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
(7) The cause of such discharge as described in §112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;
(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

This written notification will be coordinated by the facility ECC and the DES Oil Group. It is common for Dominion to include a copy of the current SPCC Plan for the facility.
The address for the regional administrator is:
Shawn M. Garvin, Regional Administrator
USEPA REGION 3
1650 Arch Street
3RA00
Philadelphia, PA 19103-2029

NOTE 5 - Site Specific Notification - Oil Plan Requirements

When making reportable notifications, the individual making the notifications should also ensure the site specific agencies are notified per their site's Oil Plan(s).

FIGURE 3-1 - OIL SPILL REPORT FORM

Information for notification of National Response Center and other response personnel.
Initial notification not to be delayed pending collection of all information

OIL SPILL REPORT FORM	
Reporter's Name (Last, First, M.I.):	
Position:	
Day Phone:	**Evening Phone:**
Company: Plains Marketing LP (Plains Terminal)	**Organization Type:**
Address: 2201 Goodwin Neck Road	**City, State, Zip:** Grafton, VA 23692
Were Materials Discharged? (Y / N)	
If NO, is there a potential for discharge? (Y / N)	
Is this a Confidential Report? No	
Are you calling for Responsible Party? Yes	**Meeting Federal obligations to report?** (Y / N)
Date Called:	**Time Called:**
Source and/or Cause of Incident:	
Date of Incident:	**Time of Incident:**
☐ **Discovered** ☐ **Occurred** ☐ **Planned**	
Container Type (Above Ground, Below Ground, Unknown):	
Incident Cause (Equipt. Failure/Transport Accident/Unknown/Etc.):	
Incident Location (Description and Address):	
Nearest City / State / Zip / County: Grafton/ VA/ 23692/ York	
Distance from City:	
Direction from City:	
Section/Township/Range (if applicable):	
Tank Oil Storage Capacity (BBL):	**SPCC-Regulated Facility Total:** 106,378,809 Gallons
Facility Latitude: 37° 12' 40" N	**Facility Longitude:** 76° 26' 48" W
Mile Post or River Mile:	
Page 1 of 2	

FIGURE 3-1 - OIL SPILL REPORT FORM, CONTINUED

OIL SPILL REPORT FORM, CONTINUED			
Material Discharged:			
CHRIS (Chemical Hazards Response Information System) Code **(or Type substance if Code Unknown)**	____ OTW (Oils, Fuel: 2) ____ ODS (Oils: diesel) ____ GAT (Gasoline: automotive) ____ KRS (Kerosene) ____ OLB (Oils, miscellaneous: lubricating)		
Discharged Quantity	**Unit of Measure**		
Material Discharged to Water (Y/N)?			
Amount Discharged to Water	**Unit of Measure**		
Response Actions Taken:			
Number of Injuries:	**Number of Deaths:**		
Were there Evacuations? (Y / N):	**Number Evacuated:**		
Were there any Damages? (Y / N):	**Damage in Dollars (approx.):**		
Medium (air, land, or water) affected:			
Any information about the incident not recorded elsewhere in the report:			
Agencies Notified:	EPA? (Y / N)	USCG? (Y / N)	OSRO? (Y / N)
	State? (Y / N)	Other? (Y / N)	
Describe:			
Page 2 of 2			

Incident Report Number
(Provided by NRC): _____

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

NAME AND ADDRESS	PHONE NUMBER	PERSON NOTIFIED	TIME NOTIFIED
REQUIRED - REFER TO FIGURE 3.1-1 and FIGURE 3.1-2 FOR REPORTING REQUIREMENTS			
Water Based Spill			
Qualfiied Individual - Yorktown Power Station - See Emergency Response Personnel Table below for list of QI names.	(757) 898-2621		
National Response Center (NRC) 2100 Second Street SW Washington D.C., District of Columbia 20593	(800) 424-8802* (202) 267-2675* (202) 267-1322 (Fax)		
Peninsula Joint Local Emergency Planning Committee (PLEPC)	(757) 890-3600		
Virginia Department of Emergency Management 7700 Midlothian Turnpike Richmond, VA 23235	(800) 468-8892* (804) 674-2400		
Virginia DEQ - Tidewater Office	(757) 518-2000 (800) 592-5482		
Land Based Spill			
Qualfiied Individual - Yorktown Power Station - See Emergency Response Personnel Table below for list of QI names.	(757) 898-2621		
Virginia Department of Emergency Management 7700 Midlothian Turnpike Richmond, VA 23235	(800) 468-8892* (804) 674-2400		
Virginia DEQ - Tidewater Office	(757) 518-2000 (800) 592-5482		
Peninsula Joint Local Emergency Planning Committee (PLEPC)	(757) 890-3600		

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

FACILITY RESPONSE TEAM / EMERGENCY RESPONSE CONTRACTORS			
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**CONTRACT RESPONSIBILITY**
IMS/Hepaco Environmental Services (OSRO)	(757) 543-5718 (804) 275-5380 (800) 888-7689*	2	Oil Spill Response Capabilities

NOTE: Refer to **APPENDIX B** for evidence of contracts / agreements.

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS

*24 Hour Number

FACILITY RESPONSE TEAM / COMPANY PERSONNEL (Facility personnel normally on-site who respond immediately)		
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**
Plains Terminal Operations & Maintenance Staff On Duty	(757) 898-9766/9700 (Office)	Immediate
Station Operations & Maintenance Staff On Duty	(757) 898-2621* (Yorktown Power. Sta.) (Office)	Immediate
Jane Kelley EHS Manager (Plains Terminal) **Qualified Individual**	(757) 898-9732 (Office) (757) 871-1752 *(Mobile)	Immediate when on-site, 2 hrs at other times
Scott Morelen Supervisor Environmental	(757) 719-1134 (Office) (757) 719-1134 *(Mobile)	Immediate when on-site, 2 hrs at other times

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

Contact the numbers within these categories as appropriate; all numbers may not need to be called.
*24 Hour Number

NAME AND ADDRESS	PHONE NUMBER	PERSON NOTIFIED	TIME NOTIFIED
RECOMMENDED			
Federal Agencies			
Federal On-Scene Coordinator (FOSC) USCG COTP Hampton Roads 4000 Coast Guard Blvd. Portsmouth, , VA 23703-2199	(757) 668-5555* (757) 484-8192 (757) 638-6641		
State Agencies			
Virginia State Police (HQ & Regional Offices)	(804) 674-2000 (800) 552-9965 (800) 582-8350 (800) 572-2260		
Emergency Medical Services			
Mary Immaculate Hospital	(757) 886-6000		
Riverside Regional Medical Center	(757) 594-2000		
Fire Departments			
York Co. Fire Chief	(757) 890-3600		
Local Agencies			
Newport News Waterworks	(757) 234-4800 (757) 926-1000		
York County Utilities	(757) 890-3751		
Additional Services			
Dominion Electric Environmental Services	(804) 273-2929		
MSDS			
MSDS Hotline	(800) 451-8346* www.3ecompany.com		
Radio Stations			
Corporate Communications - is responsible for notifying the appropriate media such as radio & TV. (Facility personnel are not to notify the media directly)	(804) 771-6115		
Television Stations			
Corporate Communications - is responsible for notifying the appropriate media such as radio & TV. (Facility personnel are not to notify the media directly)	(804) 771-6115		
Weather Services			
National Weather Service - Virginia	(703) 996-2200 (757) 899-4200 (540) 552-0084		

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

NAME AND ADDRESS	PHONE NUMBER	PERSON NOTIFIED	TIME NOTIFIED
RECOMMENDED			
Emergency Spill Response Contractor			
IMS/Hepaco Environmental Services (OSRO)Norfolk, VA.	(757) 543-5718 (804) 275-5380 (800) 888-7689*		

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

EMERGENCY RESPONSE PERSONNEL (Facility personnel and corporate support groups whose duties involve responding to emergencies)			
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**
Jane Kelley EHS Manager (Plains Terminal) **Qualified Individual**	(757) 898-9732 (Office) (757) 871-1752 *(Mobile)	Immediate when on-site, 2 hrs at other times	Environmental Compliance
Rich Wilson Terminal Manager (Plains Terminal) **Qualified Individual**	(757) 898-9644 (Office) (757) 869-0681 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Kerry Barthlome O&M Shift Supervisor (Plains Terminal) **Qualified Individual**	(757) 898-9766 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Trevor Green O&M Shift Supervisor (Plains Terminal) **Qualified Individual**	(757) 898-9766 (Office)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Darrell Magee O&M Shift Supervisor (Plains Terminal) **Qualified Individual**	(757) 898-9766 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Keith Mishoe Operations Manager (Plains Terminal) **Qualified Individual**	(757) 898-9763 (Office) (757) 812-5224 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Rodney Mayes Fire Brigade (Plains Terminal) **Qualified Individual**	(757) 898-9633 (Office) (757) 777-8531 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
David Beggs Supervisor – Operations & Maintenance **Qualified Individual**	(757) 898-2621 (Office) (757) 771-4760 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Jeffrey Pierce Supervisor – Operations & Maintenance **Qualified Individual**	(757) 898-2673 (Office) (757) 506-5208 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.

Current personnel training records, including training type and date, are kept in the facility's files as an annex to this FRP.

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

*24 Hour Number

EMERGENCY RESPONSE PERSONNEL (Facility personnel and corporate support groups whose duties involve responding to emergencies)			
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**
Sylvester Pope Supervisor - Operations & Maintenance **Qualified Individual**	(757) 898-2695 (Office) (757) 284-1655 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
David Rowe Supervisor - Operations & Maintenance **Qualified Individual**	(757) 898-2584 (Office) (757) 869-6248 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Gene White Supervisor – Operations & Maintenance **Qualified Individual**	(757) 898-2751 (Office) (757) 570-2763 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Steve Walker Control Room Operator **Qualified Individual**	(757) 898-2621 (Office) (757) 570-2715 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Duane Ragans Control Room Operator **Qualified Individual**	(757) 898-2621 (Office) (757) 570-2715 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Janet Crafford Control Room Operator **Qualified Individual**	(757) 898-2621 (Office) (757) 570-2715 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Curtis Tappan Operations **Qualified Individual**	(757) 898-2621 (Office) (757) 570-2715 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Mike Hurst Control Room Operator **Qualified Individual**	(757) 898-2621* (Office) (757) 570-2715 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Michael Lager Supervisor – Operations & Maintenance **Qualified Individual**	(757) 898-2566 (Office) (757) 812-5819 *(Mobile)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.

Current personnel training records, including training type and date, are kept in the facility's files as an annex to this FRP.

FIGURE 3-2 - NOTIFICATIONS AND TELEPHONE NUMBERS, CONTINUED

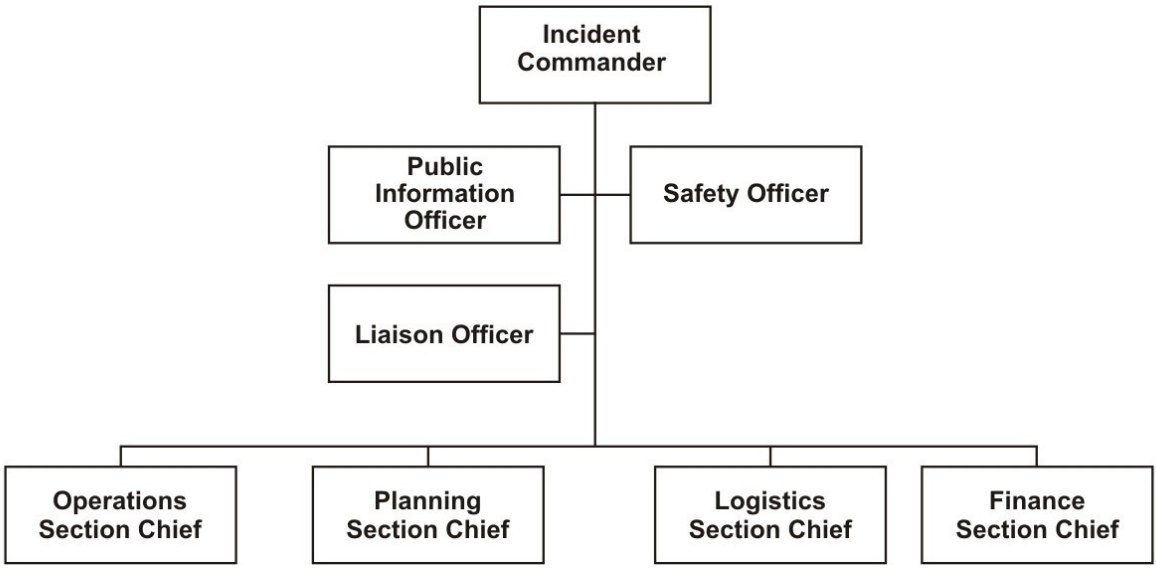
*24 Hour Number

EMERGENCY RESPONSE PERSONNEL (Facility personnel and corporate support groups whose duties involve responding to emergencies)			
NAME/TITLE	**PHONE NUMBER**	**RESPONSE TIME (hours)**	**RESPONSIBILITY DURING RESPONSE ACTION**
James Hautz Operations **Qualified Individual**	(757) 898-2621* (Office)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Rodney Cain Operations **Qualified Individual**	(757) 898-2621* (Office)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Cephus Butler Coal Equipment Operator **Qualified Individual**	(757) 898-2698 (Office)	Immediate when on-site, 2 hrs at other times	Spill containment, equipment deployment, etc. See Section 4.5 for details.
Arthur Patteson Production Coordinator	(757) 898-2635 (Office) (757) 879-1933 *(Mobile)	Immediate when on-site, 2 hrs at other times	Initial containment with on-site materials.
Jeff Lewis Production Coordinator	(804) 898-2541 (Office)	Immediate when on-site, 2 hrs at other times	Initial containment with on-site materials.
Scott Morelen Supervisor Environmental	(757) 719-1134 (Office) (757) 719-1134 *(Mobile)	Immediate when on-site, 2 hrs at other times	Environmental Compliance Support

Current personnel training records, including training type and date, are kept in the facility's files as an annex to this FRP.

4.0 RESOURCES

FIGURE 4-1 - RESPONSE TEAM ORGANIZATION CHART*



***Note:** Job descriptions for each SMT member are provided in **SECTION 4.6** of the FRP.

FIGURE 4-2 - FACILITY EQUIPMENT

SKIMMERS/PUMPS					
TYPE/MODEL/YEAR	**QUANTITY**	**CAPACITY**	**DAILY EFFECTIVE RECOVERY RATE**	**DATE FUEL LAST CHANGED**	**STORAGE LOCATION**
Vacuum Truck, Peterbilt	1	3,000 gal	686 bpd (Assumes 2.5 hrs roundtrip)	Routinely Replenished	Central Mechanical Shop (Terminal)

BOOM					
TYPE/MODEL/YEAR	**QUANTITY**	**SIZE**	**CONTAINMENT AREA (sq ft)**	**STORAGE LOCATION**	**OPERATIONAL STATUS**
Containment Boom - 18	1	600 feet	~160,000	Storm Water Settling Basin (Terminal)	Deployed
Containment Boom	2	200 feet each (400 feet total)	~140,000	Discharge Canal (Dominion)	Deployed
Containment Boom - 18	2	5,600 feet total	~1,000,000	East and West Dock (Terminal)	Operational

CHEMICALS STORED				
TYPE	**QUANTITY**	**DATE PURCHASED**	**TREATMENT CAPACITY**	**STORAGE LOCATION**
There are no Chemical Dispersants stored onsite	N/A	N/A	N/A	N/A

DISPERSANT DISPENSING EQUIPMENT			
TYPE/YEAR	**CAPACITY**	**STORAGE LOCATION**	**RESPONSE TIME (min)**
There is no Dispersant Dispensing Equipment stored onsite	N/A	N/A	N/A

SORBENTS				
TYPE/YEAR	**QUANTITY**	**ABSORPTION CAPACITY (gal)**	**STORAGE LOCATION**	**OPERATIONAL STATUS**
Oil Blankets	12 rolls	Unknown	Equipment Inc. Storage Trailer (Terminal)	Operational
Oil Snares	20 boxes	Unknown	Equipment Inc. Storage Trailer and Dock (Terminal)	Operational
Oil Snares	10 Boxes	Unknown	Spill Response Trailer and Warehouse (Dominion)	Operational
Oil Blankets	10 rolls	70 gal per roll	Spill Response Trailer and Warehouse (Dominion)	Operational
Sorbent Pillows	3 bags	42 gal per bag	Spill Response Trailer and Warehouse (Dominion)	Operational

HAND TOOLS			
TYPE/YEAR	**QUANTITY**	**STORAGE LOCATION**	**OPERATIONAL STATUS**
Various Shovels, Rakes, Buckets, etc.	Varies	Mechanical Shop (Terminal), Station Tool Room (Dominion)	Operational

FIGURE 4-2 - FACILITY EQUIPMENT, CONTINUED

COMMUNICATIONS EQUIPMENT			
TYPE/YEAR	**QUANTITY**	**STORAGE LOCATION/NUMBER**	**OPERATIONAL STATUS**
Portable Radios	~30	Various Trucks & Buildings (Terminal & Dominion)	Operational
Telephones	Various	Throughout Terminal & Dominion Facilities	Operational
Paging System	Various	Throughout Terminal & Dominion Facilities	Operational
FIRE FIGHTING AND PERSONNEL PROTECTIVE EQUIPMENT			
TYPE/YEAR	**QUANTITY**	**STORAGE LOCATION**	**OPERATIONAL STATUS**
Fire Extinguishers	Over 500	Various Locations at Terminal & Dominion	Operational
Various Other Equipment & PPE (Fire Trucks, Foam Carts, SCBA, O2 Bottles, etc)	See Terminal Plan for Complete List	Various	Operational
3% Fire Fighting Foam	Over 5,000 gal	Fire Engines & Fire House (Terminal) & Various Locations (Dominion)	Operational
OTHER			
TYPE/YEAR	**QUANTITY**	**STORAGE LOCATION**	**OPERATIONAL STATUS**
Various Hoses, Pumping Equipment, Buoys, Drums, etc.	Varies	Equipment Inc. Storage Trailer (Terminal)	Operational
Bulldozer & Excavator	1 ea	Central Mechanical Shop (Terminal)	Operational

FIGURE 4-3 - REGIONAL COMPANY AND RESPONSE CONTRACTOR'S EQUIPMENT LIST / RESPONSE TIME

*USCG Classified OSRO for facility

COMPANY/CONTRACTOR	EQUIPMENT	RESPONSE TIME
*IMS/Hepaco Environmental Services (OSRO) Norfolk, VA.	Full response Capabilities	2 hours

Note: Response equipment is tested and deployed as described in **APPENDIX A** of the FRP.

Inspection

This facility maintains written procedures and records of inspection. The inspection shall include tanks, secondary containment, and response equipment at the facility.

Facility self-inspection requires two steps:

- Checklist of items to inspect, and
- Method of recording the actual inspection and its findings; records must be maintained for five years.

Facility specific procedures for transfer areas and secondary containment inspections are provided in **APPENDIX C**. Response equipment inspection information is provided in **SECTION 7.1.2** and duplicated below:

Response Equipment Inspection and Maintenance

Company response equipment is tested and inspected as noted below, for the equipment present at this facility. Not all listed equipment is available at all facilities. The exercise program is based on the National Preparedness for Response Exercise Program (PREP), as described in **APPENDIX A**. The Environmental Compliance Coordinator or designee is responsible for ensuring that the following response equipment and testing procedures are implemented, where applicable. These consist of:

Containment boom	During semiannual boom deployment exercises, boom will be inspected for signs of structural deficiencies. If tears in fabric or rotting is observed, boom will be repaired or replaced. In addition, end connectors will be inspected for evidence of corrosion. If severe corrosion is detected, equipment will be repaired or replaced.
Oil Recovery Devices (skimmers, pumps, etc.)	During semiannual equipment deployment exercises, equipment will be inspected and operated. If any malfunction is detected, equipment will be repaired or replaced.
Miscellaneous equipment	Other response equipment identified in this Plan will be inventoried and tested on a semiannual basis to ensure that the stated quantities are in inventory and in proper working order.
Documentation	Spill/Exercise documentation requirements are specified in **SECTION A.1**. Records of equipment inspection and deployment exercises are maintained at the facility for a period of five years.

FIGURE D.3-1 may be used to record equipment inspection information. This is duplicated below as **FIGURE 4-4**.

FIGURE 4-4 - RESPONSE EQUIPMENT INSPECTION

(Other versions of this form may be used.)

ITEM	QUANTITY	LOCATION	TIME TO ACCESS/RESPOND	USEABLE CONDITION (Y/N)	DATE USED/TESTED	SHELF LIFE*	INSPECTION DATE
Vacuum Truck, Peterbilt	1	Central Mechanical Shop (Terminal)					
Containment Boom - 18	1	Storm Water Settling Basin (Terminal)					
Containment Boom	2	Discharge Canal (Dominion)					
Containment Boom - 18	2	East and West Dock (Terminal)					
There are no Chemical Dispersants stored onsite	N/A	N/A					
There is no Dispersant Dispensing Equipment stored onsite		N/A					
Oil Blankets	12 rolls	Equipment Inc. Storage Trailer (Terminal)					
Oil Snares	20 boxes	Equipment Inc. Storage Trailer and Dock (Terminal)					

* Note: For shelf life indicate the expected replacement date.

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Inspector's Signature

FIGURE 4-4 - RESPONSE EQUIPMENT INSPECTION, CONTINUED

(Other versions of this form may be used.)

ITEM	QUANTITY	LOCATION	TIME TO ACCESS/RESPOND	USEABLE CONDITION (Y/N)	DATE USED/TESTED	SHELF LIFE*	INSPECTION DATE
Oil Snares	10 Boxes	Spill Response Trailer and Warehouse (Dominion)					
Oil Blankets	10 rolls	Spill Response Trailer and Warehouse (Dominion)					
Sorbent Pillows	3 bags	Spill Response Trailer and Warehouse (Dominion)					
Various Shovels, Rakes, Buckets, etc.	Varies	Mechanical Shop (Terminal), Station Tool Room (Dominion)					
Portable Radios	~30	Various Trucks & Buildings (Terminal & Dominion)					
Telephones	Various	Throughout Terminal & Dominion Facilities					
Paging System	Various	Throughout Terminal & Dominion Facilities					
Fire Extinguishers	Over 500	Various Locations at Terminal & Dominion					

* Note: For shelf life indicate the expected replacement date.

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Inspector's Signature

FIGURE 4-4 - RESPONSE EQUIPMENT INSPECTION, CONTINUED

(Other versions of this form may be used.)

ITEM	QUANTITY	LOCATION	TIME TO ACCESS/RESPOND	USEABLE CONDITION (Y/N)	DATE USED/TESTED	SHELF LIFE*	INSPECTION DATE
Various Other Equipment & PPE (Fire Trucks, Foam Carts, SCBA, O2 Bottles, etc)	See Terminal Plan for Complete List	Various					
3% Fire Fighting Foam	Over 5,000 gal	Fire Engines & Fire House (Terminal) & Various Locations (Dominion)					
Various Hoses, Pumping Equipment, Buoys, Drums, etc.	Varies	Equipment Inc. Storage Trailer (Terminal)					
Bulldozer & Excavator	1 ea	Central Mechanical Shop (Terminal)					

* Note: For shelf life indicate the expected replacement date.

_____

Inspector's Signature

5.0 PLOT PLANS / TANK TABLE

FIGURE 5-1 - DRAINAGE DIAGRAM

(Click here for Drainage Diagram)

SEE FACILITY DIAGRAM

FOR

DRAINAGE DETAILS

FIGURE 5-2 - EVACUATION DIAGRAM

(Click here for Evacuation Diagram)

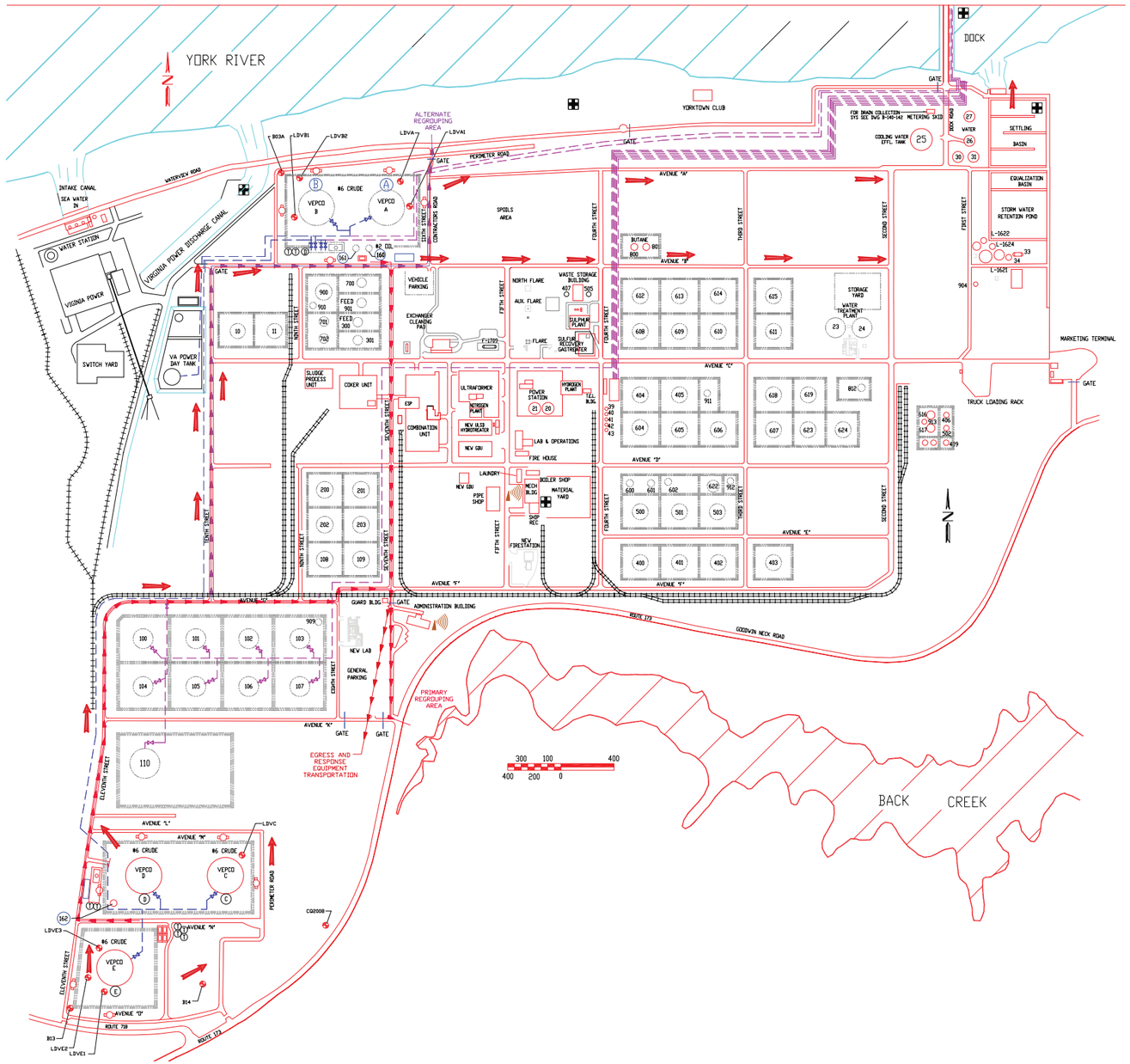
SEE FACILITY DIAGRAM

FOR

EVACUATION DETAILS

FIGURE 5-3 - FACILITY DIAGRAM

(Click here for Facility Diagram)



TANK ID	CAPACITY (GALS)	CONTENT	SECONDARY CONTAINMENT CAPACITY (GALS)	
A	21,302,274	NO. 6 FUEL OIL	33,791,523	EARTHEN BERM
B	21,295,176	NO. 6 FUEL OIL	33,791,523	EARTHEN BERM
C	21,227,052	EMPTY	43,000,467	EARTHEN BERM
D	21,222,558	EMPTY	43,000,467	EARTHEN BERM
E	21,225,795	CRUDE OIL	43,000,467	EARTHEN BERM
160	16,296	NO. 2 FUEL OIL	31,764,643	EARTHEN BERM
161	16,296	NO. 2 FUEL OIL	31,764,643	EARTHEN BERM
162	68,208	EMPTY	41,219,498	EARTHEN BERM
TRANSFORMERS	219-780	MINERAL OIL	VARIES	SEE C-6
DRUMS	1,375	USED OIL	VARIES	SEE C-6

LEGEND

- SHUT-OFF VALVE
- ABOVEGROUND FUEL PIPING (DOMINION PLAN)
- ABOVEGROUND FUEL PIPING (PLAINS PLAN)
- DIRECTION OF STORMWATER FLOW
- EMERGENCY RESPONSE EQUIPMENT
- COMMUNICATION/TELEPHONE
- EVACUATION ROUTE
- ALTERNATE EVACUATION ROUTE
- FIRE HYDRANT
- OIL TRANSFER AREA
- GROUNDWATER MONITORING WELL LOCATION
- (T) TRANSFORMER
- (D) DRUM STORAGE

REV	DATE	DESCRIPTION	DSGN	DRWN	CHKD	DSGN SUPV	PROJ ENGR	CIVIL ENGR	ELEC ENGR	MECH ENGR	ARCH	E.M. ENGR	I&C ENGR
5	7/3 2014	REVISED PER ENVIRONMENTAL REDLIINE. ADDED 'CRUDE OIL' TO CHART.	-	KTC	BWP	RWM	-	-	-	-	-	-	-	-
4	5/15 2013	REVISED PER ENVIRONMENTAL REDLINE. ADDED EMERGENCY RESPONSE EQUIPMENT LOCATIONS.	-	KTC	BWP	RWM	-	-	-	-	-	-	-	-
3	4/8 2013	REVISED PER ENVIRONMENTAL REDLINE. MODIFIED CHART CAPACITIES A, B, C, D & DRUMS.	-	KTC	BWP	RWM	-	-	-	-	-	-	-	-
2	8/16 2012	REVISED PER ENVIRONMENTAL REDLINE.	-	KTC	BWP	RWM	-	-	-	-	-	-	-	-
1	7/11 2012	REVISED TO REFLECT CHANGES TO 610 BASE DRAWING. ADDED C, D & E. ADDED LEGEND ITEMS (T) (D) & GW WELL LOCATION.	-	KTC	BWP	RWM	-	-	-	-	-	-	-	-
0	8/12 2011	ORIGINAL ISSUE.	-	-	-	-	-	-	-	-	-	-	-	-

DOMINION ENERGY™

FOSSIL & HYDRO TECHNICAL SERVICES
RICHMOND, VIRGINIA

SITE PLAN REFINERY

YORKTOWN POWER STATION

DSGN	KTC	DSGN SUPV	RWM
DRWN	KTC	ENGR SUPV	-----
CHKD	BWP	PROJ ENGR	-----
DISPL ENGR	-----	SCALE:	UNLESS OTHERWISE NOTED

DRAWING NUMBER: YT-0-SP-REF-630 REV. 5

SH 1 OF 1

FIGURE 5-4 - PIPING DIAGRAM

(Click here for Piping Diagram)

SEE FACILITY DIAGRAM

FOR

PIPING DETAILS

FIGURE 5-5 - OIL CONTAINER TABLE

Container Name/ ID No.	Product Stored	Major Type of Failure	Total Capacity (gal)	Secondary Containment Volume (gal) / Type	Tank Type	Year Constructed/ Installed	Average Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)
ABOVEGROUND OIL STORAGE TANKS - Total: 106,373,655								
Tank 160	No. 2 Fuel Oil	Leak/Failure	16,296	31,764,643/Earthen Berm	Tank	1972	8,000	East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Tank 161	No. 2 Fuel Oil	Leak/Failure	16,296	31,764,643/Earthen Berm	Tank	1972	8,000	East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Tank 162	Empty	Leak/Failure	68,208	41,219,498/Earthen Dike	Tank	1975	0	North to Oil Retention Pond to York River / Gradual to Instantaneous
Tank A	No. 6 Fuel Oil	Leak/Rupture	21,302,274	33,791,523/Earthen Berm	Tank	1972	10,000,000	East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Tank B	No. 6 Fuel Oil	Leak/Failure	21,295,176	33,791,523/Earthen Berm	Tank	1972	10,000,000	East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Tank C (Out of Service)	Empty	Leak/Failure	21,227,052	43,000,467/Earthen Dike	Tank	1975	0	North to Oil Retention Pond to York River / Gradual to Instantaneous
Tank D (Out of Service)	Empty	Leak/Failure	21,222,558	43,000,467/Earthen Dike	Tank	1975	0	North to Oil Retention Pond to York River / Gradual to Instantaneous
Tank E	Crude Oil	Leak/Failure	21,225,795	43,000,467/Earthen Dike	Tank	1975	10,000,000	North to Oil Retention Pond to York River / Gradual to Instantaneous

FIGURE 5-5 - OIL CONTAINER TABLE, CONTINUED

Container Name/ ID No.	Product Stored	Major Type of Failure	Total Capacity (gal)	Secondary Containment Volume (gal) / Type	Tank Type	Year Constructed/ Installed	Average Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)
DRUM AND / OR DRUM STORAGE AREA - Total: 1,375								
Phase I Drum Storage Area (Up to 25 @ 55 gal each)	Oil (used)	Leak/Rupture	1,375	>55/Containment Pallet	Drum			East to WRY Stormwater Basin to York River / Gradual to Instantaneous
LOADING / UNLOADING AND TRANSFER AREAS - Total: Varies								
Phase I Transfer Area	No. 2 Fuel Oil	Overfill/ Rupture/ Leakage	Varies	/ Storm Water Pond				East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Phase II Transfer Area	No. 2 Fuel Oil	Overfill/ Rupture/ Leakage	Varies	/ Oil Retention or Storm Water Pond				North to Oil Retention Pond to York River / Gradual to Instantaneous
OIL FILLED ELECTRICAL EQUIPMENT - Total: 3,779								
Transformer Phase I (PDV 3840-02)	Non-PCB Mineral Oil	Leak/Failure	224	>224 / Bermed Area to Storm Water Pond	Transformer			East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Transformer Phase I (TBV7800-01)	Non-PCB Mineral Oil	Leak/Failure	760	>760 / Bermed Area to Storm Water Pond	Transformer			East to WRY Stormwater Basin to York River / Gradual to Instantaneous
Transformer Phase II (PDV-1001-01)	PCB	Leak/Failure	219	>219 / General Containment - Oil Retention or Storm Water Pond	Transformer			North to Oil Retention Pond to York River / Gradual to Instantaneous
Transformer Phase II (PDV-1001-02)	PCB	Leak/Failure	219	>219 / General Containment - Oil Retention or Storm Water Pond	Transformer			North to Oil Retention Pond to York River / Gradual to Instantaneous
Transformer Phase II (PDV-1001-03)	PCB	Leak/Failure	219	>219 / General Containment - Oil Retention or Storm Water Pond	Transformer			North to Oil Retention Pond to York River / Gradual to Instantaneous

FIGURE 5-5 - OIL CONTAINER TABLE, CONTINUED

Container Name/ ID No.	Product Stored	Major Type of Failure	Total Capacity (gal)	Secondary Containment Volume (gal) / Type	Tank Type	Year Constructed/ Installed	Average Quantity Stored (gal)	Direction of Flow/Rate (See Plot Plan)
OIL FILLED ELECTRICAL EQUIPMENT - Total: 3,779								
Transformer Phase II (WK13)	Non-PCB Mineral Oil	Leak/Failure	578	>578 / General Containment - Oil Retention or Storm Water Pond	Transformer			North to Oil Retention Pond to York River / Gradual to Instantaneous
Transformer Phase II (XK41)	Non-PCB Mineral Oil	Leak/Failure	780	>780 / General Containment - Oil Retention or Storm Water Pond	Transformer			North to Oil Retention Pond to York River / Gradual to Instantaneous
Transformer Phase II (XK42)	Non-PCB Mineral Oil	Leak/Failure	780	>780 / General Containment - Oil Retention or Storm Water Pond	Transformer			North to Oil Retention Pond to York River / Gradual to Instantaneous
SPCC-Regulated Facility Total (Aboveground Oil Tanks, Oil Drums, Miscellaneous, Portable Oil Tanks, Underground Containers, Oil-Filled Equipment): 106,378,809								
ODCP Regulated Volume: 106,373,655								

6.0 VULNERABILITY ANALYSIS (DETAILED)

Water Intakes:
Most of the area in the vicinity of the site is served by public water. There are no known public water intakes in the vicinity. There are surface water intakes that could be impacted by a spill along the York River and tributaries, the closest being at the Yorktown Power Station. See the facility sensitivity maps (Figure 6-10) from the EPA Inland Area Contingency Plan for specific locations. A few remote areas rely on private wells; however, it is not likely that private wells would be affected by a discharge to ground, given the distance from the site and provisions for leak detection.
Schools:
There are no schools in any potential over-ground spill path, or that could be impacted by a spill fronting any waters within the planning distance discussed in this plan.
Medical Facilities:
There are no medical facilities in any potential over-ground spill path, or that could be impacted by a spill fronting any waters within the planning distance discussed in this plan.
Residential Areas:
There are no residential areas in any potential over-ground spill path. Residential areas fronting the inlets within the planning distance could be impacted by a spill, resulting in some oiling of property, an odor of oil, disruption of normal activities and potential for limited damage to property from shoreline cleanup activities. There do not appear to be any factors, which suggest that evacuation or rerouting of traffic might be necessary. The entrance to all such inlets would be boomed, if possible, for the protection of wetlands and neighborhoods, which border them.
Businesses:
The waterfront areas within the planning distance include operations, which would be impacted by an oil spill, particularly if the spill resulted in the river being closed to commercial and/or recreational vessel traffic. The impact would include a disruption of normal waterborne commerce and the cleanup operations, which would include cleanup of the shoreline, bulkheads, piers and any moored vessels. Marinas, the Yorktown Power Station, the pier at the USCG Reserve Training Center, and the US Naval Weapons Station would be impacted by the spill and the cleanup operations.

6.0 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

Wetlands or Other Sensitive Environments:
Extensive estuarine intertidal wetlands and tidal flats are located along the York River, its tributaries and the Chesapeake Bay area within the Planning Distance. Large areas of palustrine emergent, palustrine scrub-shrub, palustrine forested and palustrine open-water wetlands are found further inland. Estuarine intertidal wetlands are typically dominated by stands of cord grass, rush, sedges, and common reed. Palustrine emergent wetlands are typically dominated by stands of common reed, sedges, Japanese honeysuckle, and tearthumb. Palustrine scrub-shrub wetlands are dominated by red maple, sweet gum, smooth alder, and bayberry saplings. The herbaceous layer consists of tearthumb, sedges, and rush. Palustrine forested wetlands typically have a canopy dominated by sweet gum, red maple, and loblolly pine. The shrub layer contains saplings of the canopy species as well as bayberry, smooth alder, and black willow. Sedges, Japanese honeysuckle, and bog panic grass occur on the forest floor. These wetlands provide valuable habitat for wildlife species. Wetlands are highly sensitive to oil discharges. The vegetation and soft sediments in wetlands make oil cleanup operations difficult. If a light to moderate oil discharge should occur, the marsh should be allowed to recover naturally. If a large oil discharge should occur, oil accumulation on the sediment surface in the marsh can be removed manually or by low pressure flushing, using proper procedures to avoid further penetration of oil into the sediments. The EPA Inland Area Contingency Plan identifies multiple wetlands, spawning grounds, and other environmentally sensitive areas within the planning distance. See the facility sensitivity maps (Figure 6-10) from the EPA Inland Area Contingency Plan for specific locations.
Fish and Wildlife:
According to the 2004 Virginia State Water Quality Standards (9 VAC 25-260-50), the York River is classified as Class IIa Waters (Estuarine Shellfish Waters). The allowable standard for dissolved oxygen level is 4.0 mg/l with an average of 5.0 mg/l. The allowable standard for pH range is from 6.0 to 9.0. The bacteria standards for shellfish apply to these waters. The surface waters are classified as “effluent limited,” meaning that legally mandated minimum wastewater treatment requirements as applied to the effluent of a wastewater treatment plant are sufficient to maintain water quality at or above the applicable standards. Numerous shellfish grounds are condemned in this portion of the river. The closures begin at Taskinias Creek and continue downstream with Skimino Creek, York River at Cheatham Annex, York River at the US Naval Weapons Supply Center, King Creek, Felgates Creek, York River and Wormley Creek, Back Creek, Perrin River, Timberneck Creek, Aberdeen Creek, Jones Creek, Cedarbush Creek, Sarah Creek and Fox Creek. The condemnations are related to buffer zones surrounding many of the point sources as well as non-point sources. The York River is heavily used for recreational fishing. NOAA lists the portion of the river adjacent to Yorktown as an anadromous finfish spawning and nursery area. The mouth of the Chesapeake Bay supports a large habitat of blue crab. NOAA lists this area as a “critical crab habitat”. Numerous submerged aquatic vegetation beds are located in the Goodwin Island area and downstream along the York River and into Back River. The York River, Chesapeake Bay, and all associated tributaries could be affected by a major surface water oil discharge.

6.0 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

Lakes and Streams:
An oil discharge would not affect any streams above the point of tidal influence nor would it affect any lakes.
Endangered Flora and Fauna:
The Virginia Department of Game and Inland Fisheries (VDGIF) reported in 2005 that the northern diamondback terrapin, a candidate species for federal protection, has been documented within 1.5 miles of the site. Suitable habitat for this species exists in the vicinity of the site. The VDGIF has also reported that the bald eagle, a federally threatened species, has been documented within 1.75 miles of the site. The bald eagle feeds chiefly on fish and is attracted to weakened prey, and might feed on oil-contaminated fish. In addition, the leatherback sea turtle (a federal threatened species), Kemp's ridley sea turtle (a state-designated threatened species) and loggerhead sea turtle (a state-designated threatened species) are known to occur in Chesapeake Bay and the lower reaches of its tributaries. The effect of oil on sea turtle species is largely unknown. Because these species are protected, efforts should be made to protect their habitat. Several peregrine falcon nests are located in close proximity to the potential spill path. The peregrine falcon is a federal-designated endangered species. This species feeds on shorebirds and small seabird, but are attracted to weakened prey and might feed on oil contaminated birds. In addition, the VDGIF reports that the gull-billed tern, a state-designated threatened species, is known to breed on Fisherman's Island. This species could be affected by an oil discharge. The VDGIF also states that the facility is approximately 0.25 miles from a portion of the York River that has been designated as a Confirmed Anadromous Fish Use Area due to the documented occurrences of the following anadromous and semi-anadromous species: alewife, striped bass, blueblack herring, yellow perch, American shad, and hickory shad. The Virginia Department of Agriculture and Consumer Services (2005) has stated that there are no known state listed endangered or threatened plant or insect species in the immediate vicinity of the potential spill path. The Virginia Natural Heritage Program (2005) does not list any species of concern as occurring in the immediate vicinity of the potential spill path.

6.0 VULNERABILITY ANALYSIS (DETAILED), CONTINUED

Recreational Areas:
A number of recreational areas front the York River and Inlets within the planning distance. The recreational areas include the York River State Park, Colonial National Parkway, Grandview Park, and Yorktown Battlefield Site (Colonial National Historic Park). These parks, with the exception of the wetland areas within, should not be adversely affected by an oil spill.
Transportation Routes (Air, Water, Land):
A spill is not likely to directly impact any road, railroad or other surface transportation. Waterborne activity might be suspended if the river was closed to commercial and/or recreational vessel traffic during oil cleanup operations.
Utilities:
A worst-case discharge might cause a portion of the Yorktown Power Station to shut down. Since the local communities are powered by the central grid and not directly by Yorktown Power Station, curtailment of generation at the station should have no impact on the surrounding communities. There are no other utilities that might be disrupted by a spill.
Other Applicable Areas:
There are a large number of marinas and public boat ramps in the area. Wormley Creek, Sarah Creek, Perrin River and Back River all have one or more marinas and boat ramps. Much of the west bank of the York River upstream of the site is property belonging to the federal government and used for defense purposes. It is not likely that any operations there would be affected by a spill, but there may be access problems involved in shoreline cleanup operations. No historical landmarks were identified in the potential spill path that would be adversely affected by an oil spill.

7.0 SENSITIVITY MAPS

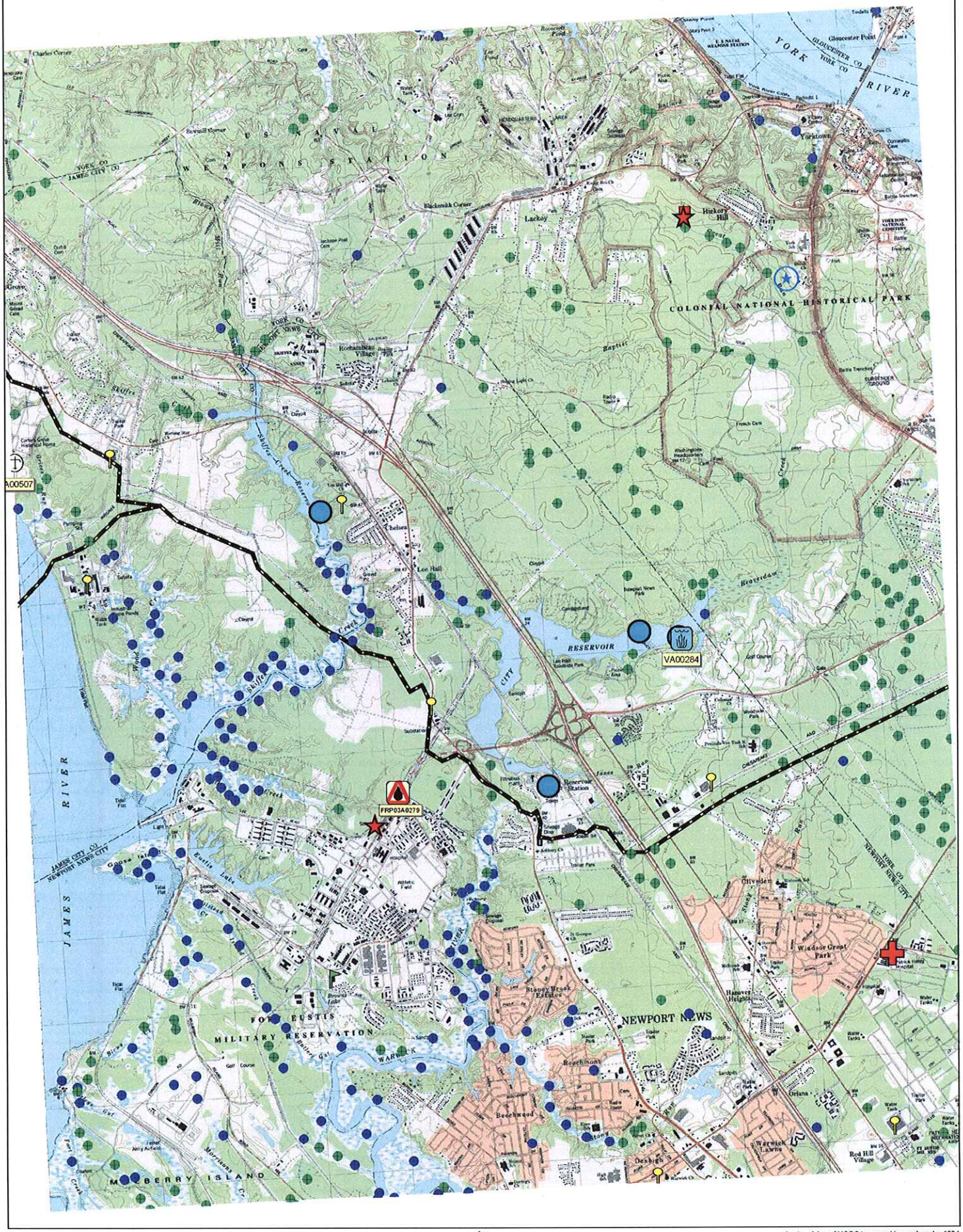
File Name(s):
1. Fig 6.10 - Facility Sensitivity Maps.pdf

Legend

- Public recreational area
- Boating
- Locks and Dams
- Sport fishing
- Marina
- Industrial intake
- Drinking water intake
- Historical/Archeological site
- FRP
- Hospital
- NPDES
- RCRA
- TRIS
- CERCLIS/NPL
- Public Surface Water Intake

- Swamp/Marsh, tidal or fresh
- Wetlands
- Migratory pathway and feeding area
- Migratory pathway and feeding area
- Reptiles/Amphibians nursery area and/or concentration area
- Terrestrial mammals concentration area
- Shellfish seed, abundant, leased mussel, or endangered mussel beds
- Spawning grounds, breeding grounds, or nesting area
- lakes/ponds
- Intertidal flat, exposed and/or sheltered
- Small Riverine, tidal/non-tidal
- Island
- Sheltered vegetated low bank
- Animals/Plants that are under endangered species act
- Wildlife refuge
- National/State/Local Park not water dependent
- State/National/Local park and/or beach
- Wildlife refuge
- State/National/Local park and/or beach
- State/Federal and private fish hatcher
- National/State Conservation Area
- Federal/State waterfowl and game management area
- State/National/Local park and/or beach
- National/State/Local Park not water dependent
- Specially designed residential, commerical, and industrial area
- Private conservation area

YORKTOWN QUADRANGLE (F-58)



EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

Scale 0 0.5 1 Miles

N

Last revision of USGS topographic quadrangle: 1984

PDF generated: January 30, 2001

POQUOSON WEST QUADRANGLE (F-59)

EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

POQUOSON EAST QUADRANGLE (F-60)

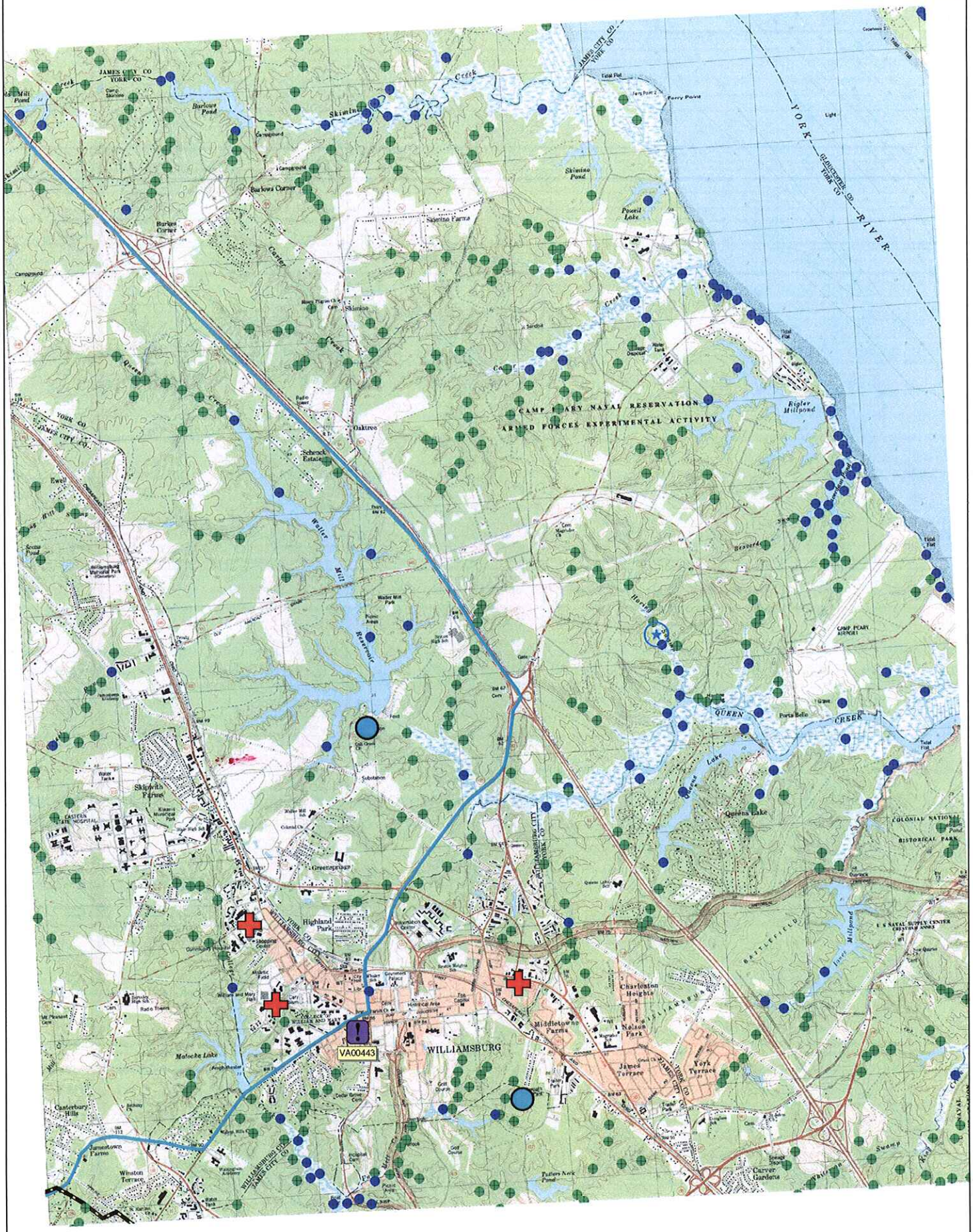
EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

Scale 0 0.5 1 Miles

Last revision of USGS topographic quadrangle: 1986
PDF generated: January 30, 2001

N

WILLIAMSBURG QUADRANGLE (G-57)



EPA United States Environmental Protection Agency — Inland Area Contingency Planning — Region III

Scale 0 0.5 1 Miles

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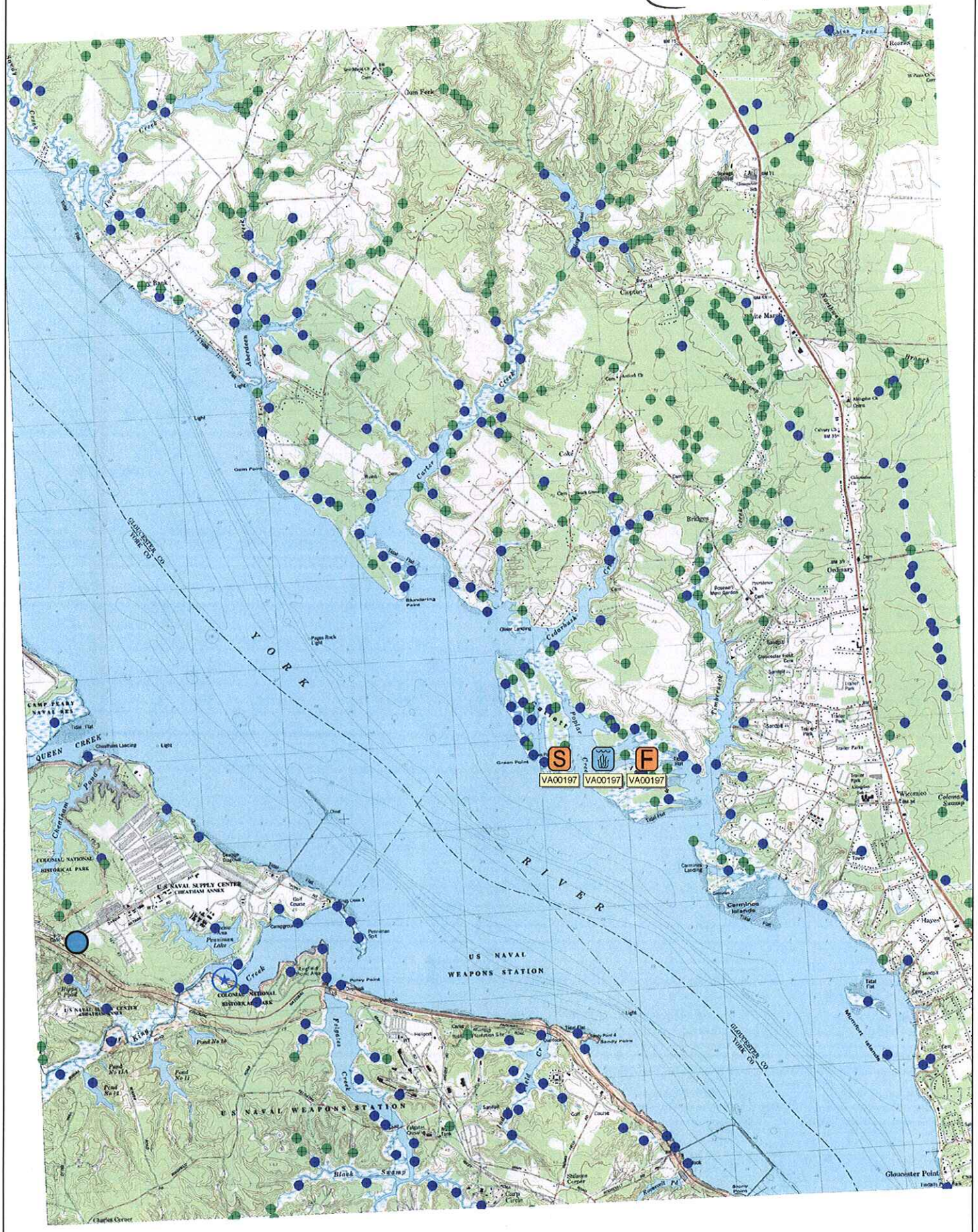
Last revision of USGS topographic quadrangle: 1984
PDF generated: January 30, 2001

CLAY BANK QUADRANGLE (G-58)



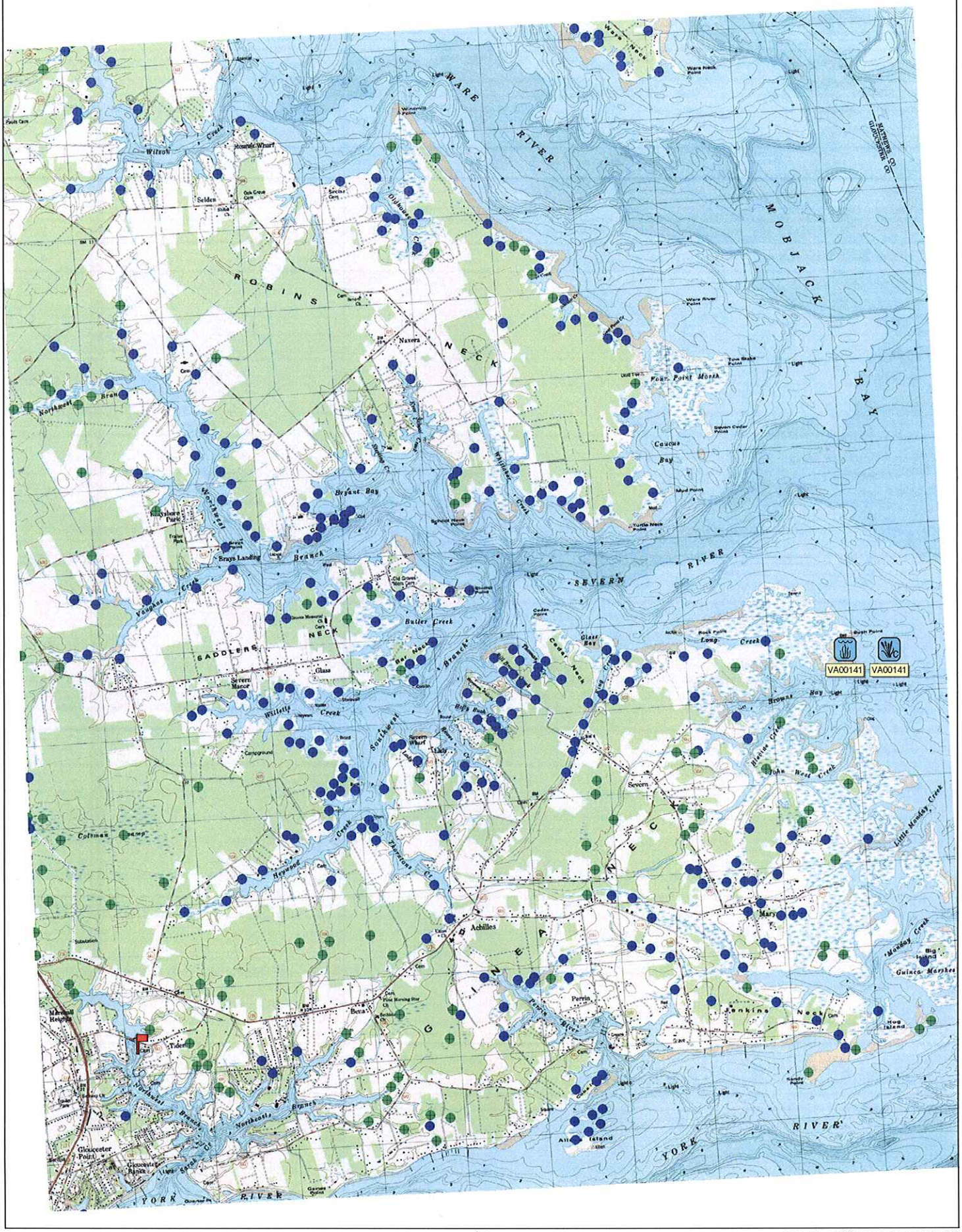
EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

Scale
0 0.5 1 Miles

Last revision of USGS topographic quadrangle: 1984
PDF generated: January 30, 2001

N

ACHILLES QUADRANGLE (G-59)



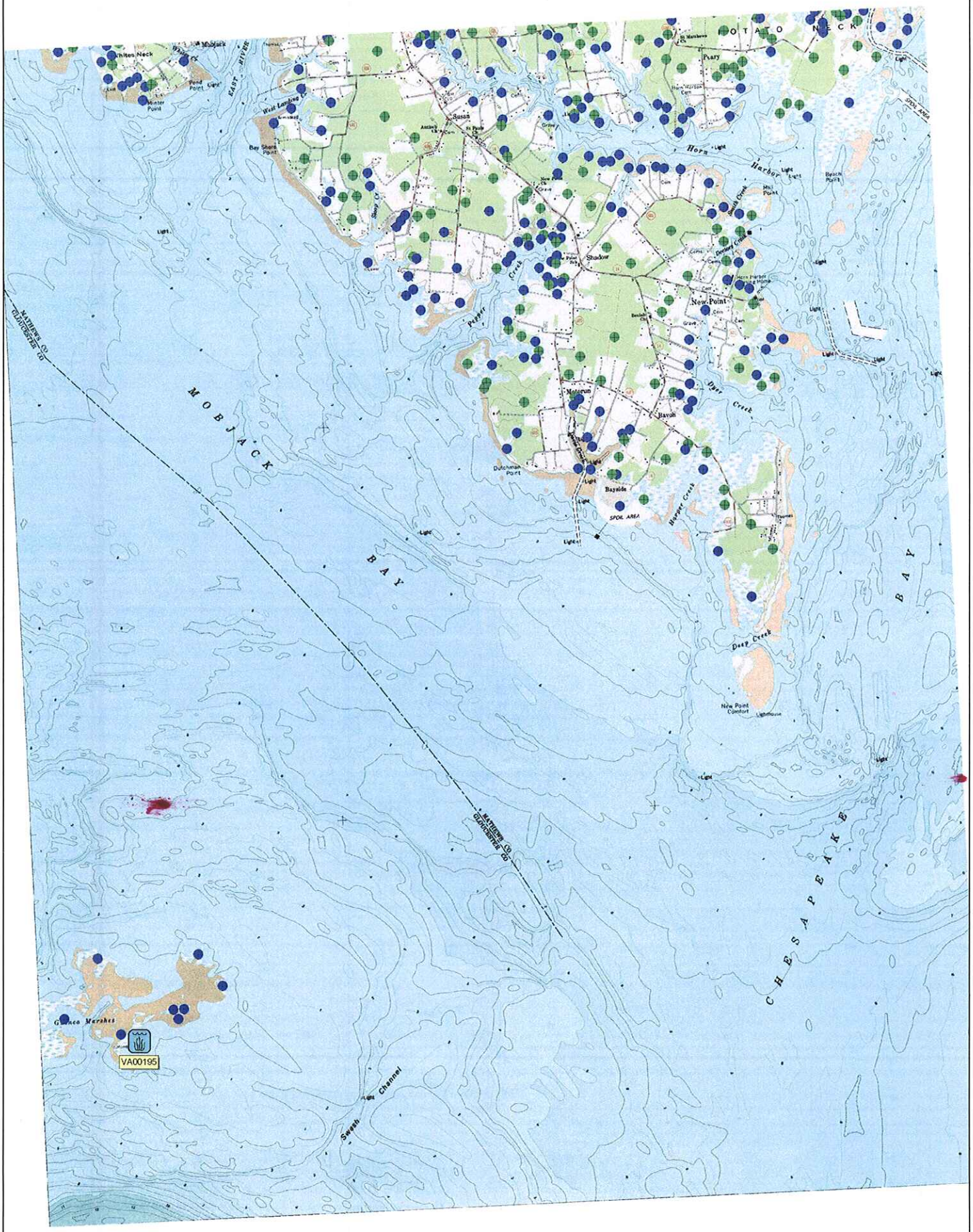
EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

Scale 0 0.5 1 Miles

Last revision of USGS topographic quadrangle: 1983
PDF generated: January 30, 2001

N

NEW POINT COMFORT QUADRANGLE (G-60)



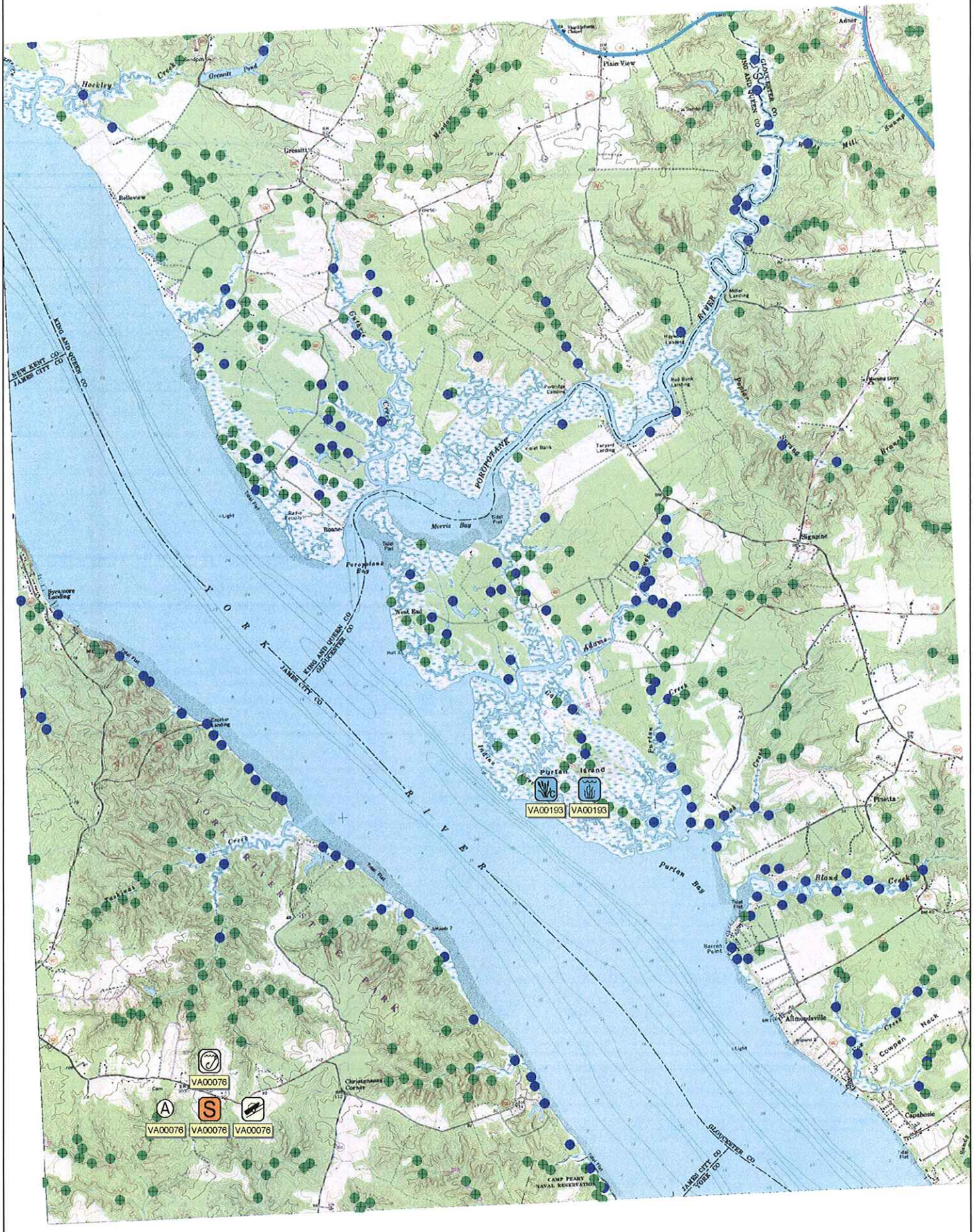
EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

Scale 0 0.5 1 Miles

Last revision of USGS topographic quadrangle: 1986
PDF generated: January 30, 2001

N

GRESSITT QUADRANGLE (H-57)



EPA United States Environmental Protection Agency Inland Area Contingency Planning Region III

Scale 0 0.5 1 Miles

Last revision of USGS topographic quadrangle: 1986
PDF generated: January 30, 2001

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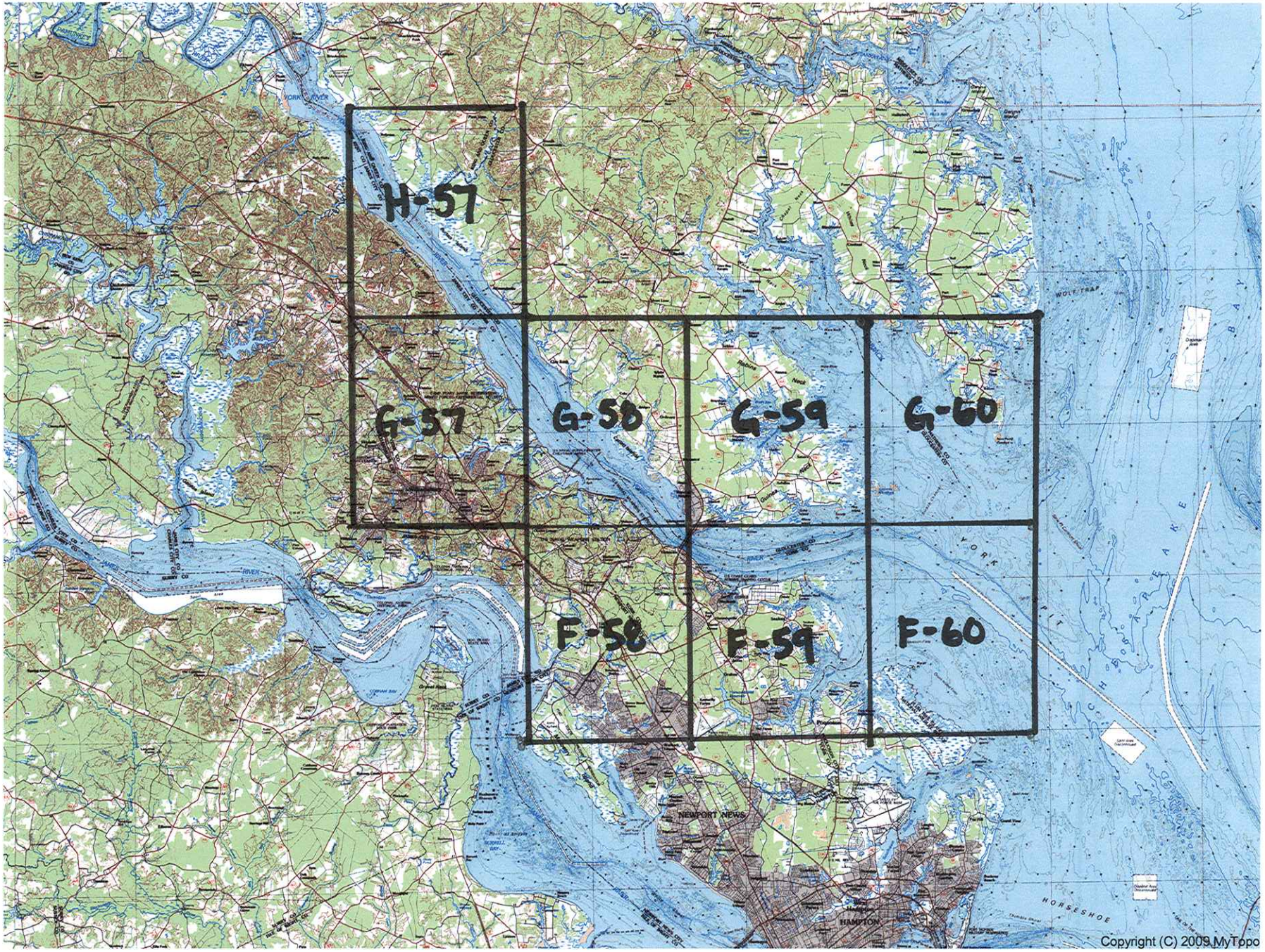

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FEET